



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300



Indoor Distribution Test Report

Relevant Standards
IES LM-79-2008
ANSI C82.77-2002

Prepared For
Mercury Lighting

John Andrews
20 Audrey Pl
Fairfield, NJ 07004-3416
United States

Catalog Number
LR215-22G-3800-35K-A401-UNI-XXXX

Order Number
11540194
Test Number
11540194.11

Test Date

2016-11-29

Prepared By

Daniel Booth, Technician

Approved By

Timothy Wagner, Project Handler

The results contained in this report pertain only to the tested sample.
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.
This report must not be used by the client to claim product certification, approval, or endorsement by
NVLAP, NIST, or any agency of the Federal Government.



Luminaire Description: Formed steel housing, formed steel reflectors, frosted linear patterned plastic lens enclosure
Lamp: 44 white LEDs
Mounting: Recessed
Ballast/Driver: One Philips Advance Xitanium XI040C110V054BST1

Luminaire



Luminaire Characteristics

Luminous Length: 23.00 in.
Luminous Width: 20.50 in.

Summary of Results

Total Luminaire Output:	3594 Lumens
Luminaire Efficacy:	101.3 lm/w
Maximum Candela:	1244 Candela

Test Conditions

Test Temperature:	25.4 °C
Voltage:	120.0 VAC
Current:	0.2965 A
Power:	35.48 W
Power Factor:	0.997
Frequency:	60 Hz
Current THD:	5.90 %

Laboratory results may not be representative of field performance
Ballast factors have not been applied



Distribution - Goniophotometer

Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.4 °C	120.0 VAC	0.2965 A	35.48 W	0.997	60 Hz	5.90 %

Summary of Results

Spacing Criteria

0-180: 1.17

90-270: 1.17

Total Lumen Output:

3594 Lumens

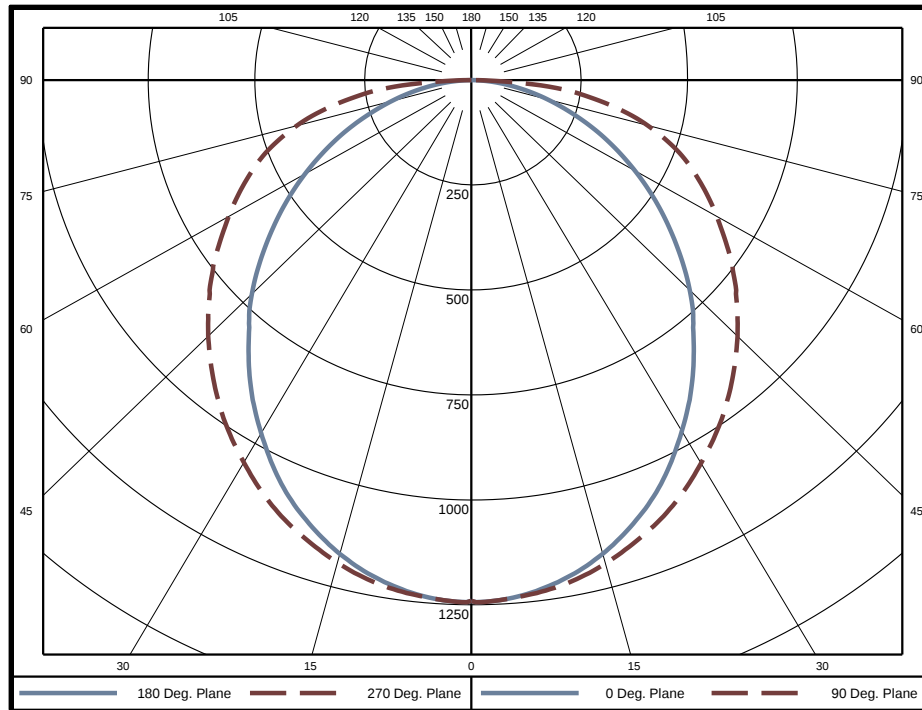
Luminaire Efficacy:

101.3 lm/w

Maximum Candela:

1244 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	29.6	0.8%	60-65	243.7	6.8%	120-125	0	0.0%
5-10	87.4	2.4%	65-70	214.0	6.0%	125-130	0	0.0%
10-15	141.7	3.9%	70-75	179.2	5.0%	130-135	0	0.0%
15-20	190.2	5.3%	75-80	139.3	3.9%	135-140	0	0.0%
20-25	231.6	6.4%	80-85	91.3	2.5%	140-145	0	0.0%
25-30	263.9	7.3%	85-90	30.0	0.8%	145-150	0	0.0%
30-35	286.9	8.0%	90-95	0	0.0%	150-155	0	0.0%
35-40	300.6	8.4%	95-100	0	0.0%	155-160	0	0.0%
40-45	305.3	8.5%	100-105	0	0.0%	160-165	0	0.0%
45-50	301.6	8.4%	105-110	0	0.0%	165-170	0	0.0%
50-55	289.1	8.0%	110-115	0	0.0%	170-175	0	0.0%
55-60	269.1	7.5%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1532	42.6%
0-60	2697	75.0%
0-90	3595	100.0%
90-180	0	0.0%



Candela Tabulation

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
	0	1241	1241	1241	1241	1241	1241	1241	1241	1241	1241	1241	1241	1241	1241	1241
	5	1235	1233	1230	1231	1236	1231	1230	1233	1235	1233	1230	1231	1236	1231	1230
	10	1209	1208	1209	1213	1220	1213	1209	1208	1209	1208	1209	1213	1220	1213	1209
	15	1169	1170	1175	1183	1192	1183	1175	1170	1169	1170	1175	1183	1192	1183	1175
	20	1115	1119	1129	1144	1154	1144	1129	1119	1115	1119	1129	1144	1154	1144	1129
	25	1049	1056	1074	1096	1109	1096	1074	1056	1049	1056	1074	1096	1109	1096	1074
	30	970	982	1008	1038	1054	1038	1008	982	970	982	1008	1038	1054	1038	1008
	35	888	902	938	977	996	977	938	902	888	902	938	977	996	977	938
	40	798	817	862	909	931	909	862	817	798	817	862	909	931	909	862
	45	715	736	784	838	863	838	784	736	715	736	784	838	863	838	784
	50	622	646	706	767	792	767	706	646	622	646	706	767	792	767	706
	55	531	556	621	692	722	692	621	556	531	556	621	692	722	692	621
	60	440	468	538	615	650	615	538	468	440	468	538	615	650	615	538
	65	352	381	458	543	581	543	458	381	352	381	458	543	581	543	458
	70	267	297	380	470	508	470	380	297	267	297	380	470	508	470	380
	75	187	219	304	385	419	385	304	219	187	219	304	385	419	385	304
	80	115	147	220	284	310	284	220	147	115	147	220	284	310	284	220
	85	52	75	119	160	178	160	119	75	52	75	119	160	178	160	119
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	45	90
	0	4078	4078
	45	3323	3645
	55	3041	3560
	65	2740	3559
	75	2379	3862
	85	1960	4479



Utilization of Lumens - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																	
0	4279	4279	4279	4279	4180	4180	4180	4180	3994	3994	3994	3824	3824	3824	3668	3668	3668	3594
1	3874	3687	3519	3368	3774	3604	3451	3313	3450	3323	3207	3307	3204	3108	3176	3093	3015	2937
2	3507	3192	2932	2712	3410	3123	2883	2679	2993	2791	2616	2874	2704	2555	2763	2623	2498	2417
3	3189	2792	2485	2240	3098	2734	2449	2219	2625	2380	2178	2524	2315	2140	2431	2254	2102	2020
4	2916	2468	2140	1890	2831	2420	2113	1876	2328	2061	1849	2243	2011	1823	2163	1963	1798	1717
5	2680	2203	1870	1624	2602	2162	1849	1614	2084	1808	1596	2012	1769	1578	1945	1731	1560	1481
6	2474	1982	1652	1416	2404	1948	1636	1409	1882	1603	1396	1820	1572	1383	1763	1542	1370	1294
7	2294	1797	1475	1249	2231	1768	1462	1245	1711	1436	1235	1659	1410	1225	1609	1386	1216	1143
8	2136	1640	1328	1114	2079	1615	1318	1111	1567	1296	1103	1521	1276	1096	1478	1256	1089	1019
9	1996	1506	1206	1003	1944	1484	1197	1000	1442	1179	994	1403	1162	989	1366	1145	983	916
10	1872	1390	1101	909	1825	1371	1094	907	1335	1079	903	1301	1065	898	1268	1051	894	830

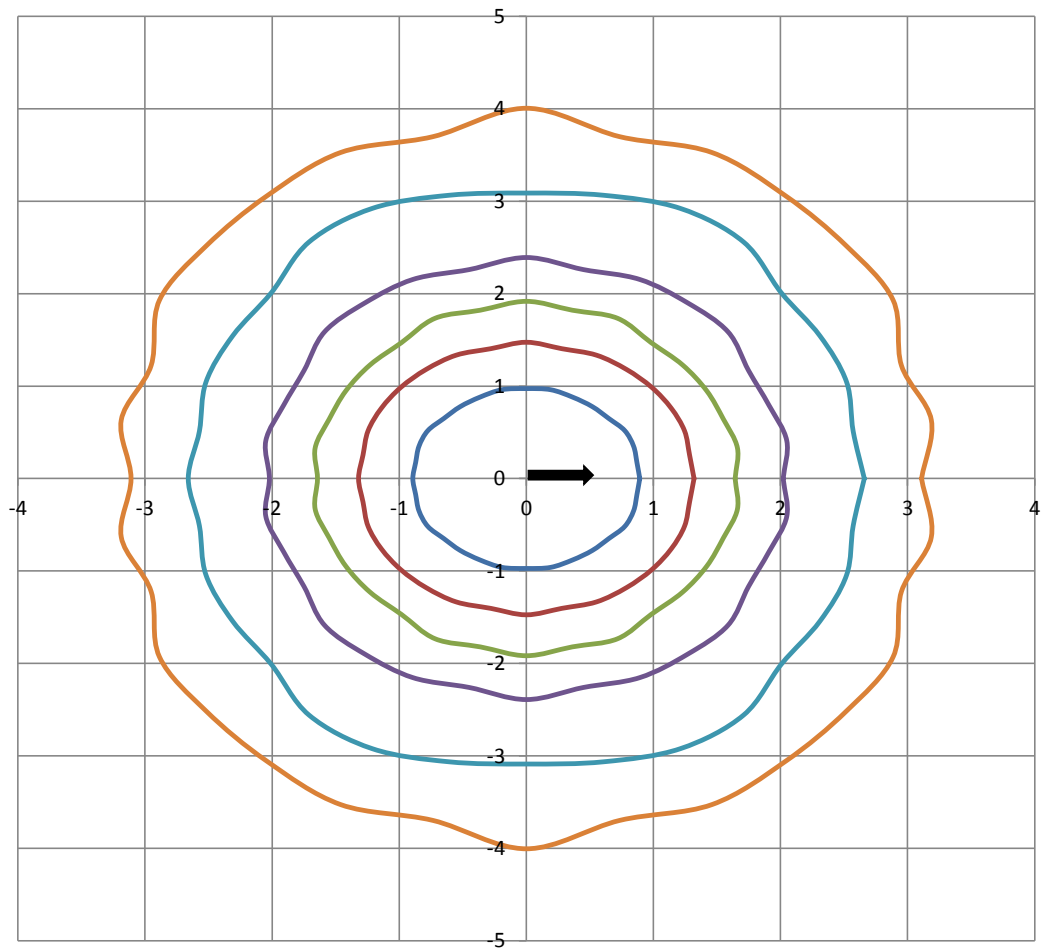
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1241 Candela
Central Cone Intensity:	1237 Candela
Beam Flux:	2478.1 Lumens
Beam Angle (0-180):	100.2 Degrees
Beam Angle (90-270):	124.3 Degrees
Field Angle (0-180):	158.7 Degrees
Field Angle (90-270):	172.7 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		77.5	4.85
6.00		34.5	7.28
8.00		19.4	9.71
10.0		12.4	12.1
12.0		8.61	14.6
14.0		6.33	17.0
16.0		4.85	19.4



ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

5 fc 2 fc 1 fc 0.5 fc 0.2 fc 0.1 fc